

**[0051]** In summary, the present invention provides a communication device having a full-length touchscreen display. This enables the display of additional data and information not possible on communication devices having a fixed keypad.

**[0052]** Numerous modifications and variations of the present invention are possible in light of the above teachings. It is therefore to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described herein.

What is claimed is:

1. A communications device comprising:

a transmitter that converts electrical representations of aural signals into signals for transmission over a medium;

a receiver that receives communication signals for conversion into representations of aural signals;

a touch-screen display comprising icons representing numbers that are used to enter at least a number in response to a contact area, on the display, over a particular icon to be entered; and

a controller, coupled to the transmitter, the receiver, and the touch-screen display, the controller controlling the communications device and comprising an apparatus that generates the icons representing numbers for display on the touch-screen display, the controller additionally comprising an apparatus that generates an accumulated telephone number in response to the particular icons contacted on the touch-screen display.

2. The communications device of claim 1 wherein the controller is a microprocessor.

3. The communications device of claim 1 wherein the medium for transmission is a wireless channel.

4. The communications device of claim 1 and further including a microphone for generating, from speech, electrical representations of aural signals for transmission.

5. The communications device of claim 1 and further including a speaker for generating aural signals from received electrical representations of aural signals.

6. The communications device of claim 1 wherein the communications device comprises a telephone and a personal digital assistant.

7. The communications device of claim 6 wherein a telephone mode of operation is selected by contact of an icon, generated by the controller, representing the telephone mode.

8. The communications device of claim 6 wherein a personal digital assistant mode of operation is selected by contact of an icon, generated by the controller, representing the personal digital assistant mode.

9. The communications device of claim 1 and further comprising:

a headset comprising:

a speaker for generating aural signals from received electrical representations of aural signals;

a microphone for generating, from speech, electrical representations of aural signals for transmission; and

a low power transceiver that couples the headset to the communications device.

10. A wireless radiotelephone that communicates wireless signals with a base station, the wireless radiotelephone having a personal digital assistant mode and a communications mode, the wireless radiotelephone comprising:

a transmitter that converts electrical representations of aural signals into communication signals for transmission over a wireless channel to the base station;

a receiver that receives wireless signals from the base station for conversion into received electrical representations of aural signals;

a touch-screen display comprising icons representing numbers that are used to enter a number in response to a contact, on the display, over a particular icon to be entered; and

a controller, coupled to the transmitter, the receiver, and the touch-screen display, the controller controlling operation of the communications device and comprising an apparatus that generates the icons representing numbers for display on the touch-screen display, the controller additionally comprising an apparatus that generates and displays an accumulated telephone number in response to the particular icons contacted on the touch-screen display.

11. The wireless radiotelephone of claim 10 wherein the wireless channel is a code division multiple access air interface channel.

12. The wireless radiotelephone of claim 10 and further comprising:

a headset comprising:

a speaker for generating aural signals from the received electrical representations of aural signals;

a microphone for generating, from speech, the electrical representations of aural signals for transmission; and

a low power wireless transceiver that couples the headset to the wireless radiotelephone.

13. The wireless radiotelephone of claim 10 wherein the personal digital assistant mode is selected by contact of an icon, generated by the controller, representing the personal digital assistant mode.

14. The wireless radiotelephone of claim 10 wherein the telephone mode is selected by contact of an icon, generated by the controller, representing the telephone mode.

15. A method for communication by a buttonless communications device having a telephone mode, the method comprising the steps of:

generating a plurality of number icons;

displaying the plurality of number icons on a touchscreen display; and

generating a telephone number in response to which particular icons are selected by contact with the touch-screen display.

16. The method of claim 15 and further comprising the steps of:

generating an icon representing the telephone mode;

displaying the telephone mode icon on the touchscreen display; and